

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-60969-1

Client Project/Site: Everett Terminal - Outfall 01 A

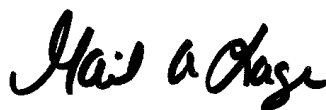
For:

Exxon Global Remed. Grp

52 Beacham Street

Everett, Massachusetts 02149

Attn: Damian Guzman



Authorized for release by:

9/15/2014 9:14:14 AM

Gail Lage, Senior Project Manager

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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## Sample Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-60969-1	Outfall 01 A-TSS - 1	Wastewater	09/06/14 19:38	09/09/14 08:15
490-60969-4	Outfall 01	Wastewater	09/06/14 19:38	09/09/14 08:15

## Case Narrative

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

**Job ID: 490-60969-1**

**Laboratory: TestAmerica Nashville**

### Narrative

#### Job Narrative 490-60969-1

#### Receipt

The samples were received on 9/9/2014 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method(s) 1664A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 189949 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Definitions/Glossary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

### Qualifiers

#### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Client Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

**Client Sample ID: Outfall 01 A-TSS - 1**

**Lab Sample ID: 490-60969-1**

**Date Collected: 09/06/14 19:38**

**Matrix: Wastewater**

**Date Received: 09/09/14 08:15**

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	26.6		2.00	1.40	mg/L			09/09/14 16:09	1

## Client Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

**Client Sample ID: Outfall 01**

**Date Collected: 09/06/14 19:38**

**Date Received: 09/09/14 08:15**

**Lab Sample ID: 490-60969-4**

**Matrix: Wastewater**

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	2.07	J	4.17	1.46	mg/L		09/11/14 10:51	09/11/14 10:51	1

# QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-189931/1-A

Matrix: Water

Analysis Batch: 189949

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 189931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.40		4.00	1.40	mg/L	-	09/11/14 10:51	09/11/14 10:51	1

Lab Sample ID: LCS 490-189931/2-A

Matrix: Water

Analysis Batch: 189949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 189931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	41.7	38.54		mg/L	-	92	78 - 114

Lab Sample ID: LCSD 490-189931/3-A

Matrix: Water

Analysis Batch: 189949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 189931

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease (HEM)	41.7	37.81		mg/L	-	91	78 - 114	2	18

Lab Sample ID: 490-60990-D-1-A MS

Matrix: Water

Analysis Batch: 189949

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 189931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	<1.60		46.0	33.68	F1	mg/L	-	73	78 - 114

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-189291/1

Matrix: Water

Analysis Batch: 189291

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<0.700		1.00	0.700	mg/L	-		09/09/14 16:09	1

Lab Sample ID: LCS 490-189291/2

Matrix: Water

Analysis Batch: 189291

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	99.00		mg/L	-	99	90 - 110

Lab Sample ID: LCSD 490-189291/3

Matrix: Water

Analysis Batch: 189291

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	100	90.20		mg/L	-	90	90 - 110	9	20

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## QC Sample Results

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

### Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 490-60804-G-1 DU

Matrix: Water

Analysis Batch: 189291

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	57.2		59.60		mg/L		4	20

Lab Sample ID: 490-60895-J-1 DU

Matrix: Water

Analysis Batch: 189291

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	45.2		44.00		mg/L		3	20

## QC Association Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

### General Chemistry

#### Analysis Batch: 189291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60804-G-1 DU	Duplicate	Total/NA	Water	SM 2540D	
490-60895-J-1 DU	Duplicate	Total/NA	Water	SM 2540D	
490-60969-1	Outfall 01 A-TSS - 1	Total/NA	Wastewater	SM 2540D	
LCS 490-189291/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 490-189291/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 490-189291/1	Method Blank	Total/NA	Water	SM 2540D	

#### Prep Batch: 189931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60969-4	Outfall 01	Total/NA	Wastewater	1664A	
490-60990-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	
LCS 490-189931/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 490-189931/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 490-189931/1-A	Method Blank	Total/NA	Water	1664A	

#### Analysis Batch: 189949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60969-4	Outfall 01	Total/NA	Wastewater	1664A	189931
490-60990-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	189931
LCS 490-189931/2-A	Lab Control Sample	Total/NA	Water	1664A	189931
LCSD 490-189931/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	189931
MB 490-189931/1-A	Method Blank	Total/NA	Water	1664A	189931

## Lab Chronicle

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

**Client Sample ID: Outfall 01 A-TSS - 1**

**Date Collected: 09/06/14 19:38**

**Date Received: 09/09/14 08:15**

**Lab Sample ID: 490-60969-1**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	500 mL	1000 mL	189291	09/09/14 16:09	CRM	TAL NSH

**Client Sample ID: Outfall 01**

**Date Collected: 09/06/14 19:38**

**Date Received: 09/09/14 08:15**

**Lab Sample ID: 490-60969-4**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	920 mL	960 mL	189949	09/11/14 10:51	BAD	TAL NSH
Total/NA	Prep	1664A			920 mL	960 mL	189931	09/11/14 10:51	BAD	TAL NSH

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Method Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH

### Protocol References:

1664A = EPA-821-98-002

SM = "Standard Methods For The Examination Of Water And Wastewater",

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Certification Summary

Client: Exxon Global Remed. Grp  
Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-60969-1

## Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	10-31-14
Arizona	State Program	9	AZ0473	05-05-15
Arkansas DEQ	State Program	6	88-0737	04-25-15
California	NELAP	9	1168CA	10-31-14 *
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-15
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	10-31-14 *
Kentucky (UST)	State Program	4	19	06-30-15
Louisiana	NELAP	6	30613	06-30-15
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-15
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-15
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-15
New Hampshire	NELAP	1	2963	10-09-14 *
New Jersey	NELAP	2	TN965	06-30-15
New York	NELAP	2	11342	03-31-15
North Carolina (WW/SW)	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14 *
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-15
Oregon	NELAP	10	TN200001	04-29-15
Pennsylvania	NELAP	3	68-00585	06-30-15
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-15
South Carolina (DW)	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-15
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-15
Virginia	NELAP	3	460152	06-14-15
Washington	State Program	10	C789	07-19-15
West Virginia DEP	State Program	3	219	02-28-15
Wisconsin	State Program	5	998020430	08-31-15
Wyoming (UST)	A2LA	8	453.07	12-31-15

\* Certification renewal pending - certification considered valid.

TestAmerica Nashville

## COOLER RECEIPT FORM



490-60969 Chain of Custody

Cooler Received/Opened On 9/9/2014 @ 0815

1. Tracking # 8223 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 0.3 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EUA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) u2m

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) man

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) u2m

I certify that I attached a label with the unique LIMS number to each container (initial) u2m

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..# 1

**ExonMobil**

District (CA)

Flow (MGD) \_\_\_\_\_  
pH \_\_\_\_\_  
TRC \_\_\_\_\_

## Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp

Job Number: 490-60969-1

Login Number: 60969

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	